

JOINT MEDICAL OPERATIONS - TELEMEDICINE ADVANCED CONCEPT TECHNOLOGY DEMONSTRATION



Final Program Review

11 February 2003



Administrative Information

JMO-T
Advanced Concept
Technology Demonstration

- Turn off ringers on cell phones
- Numbers for people to contact you: 301-319-9770, 7143, or 9068
- Morning break (0940) and lunch (1130) - room 1W80
- Small meeting / conference area - room 1W76
- Rest rooms, first hallway on the right, look to the left
- Smoking area: outside main entrance



AGENDA

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- | | |
|-------------|--------------------------------------|
| • 0800-0815 | Registration & Coffee |
| • 0815-0820 | Introduction / Admin Remarks |
| • 0820-0835 | Opening Remarks |
| • 0835-0910 | Program Overview |
| • 0910-0940 | Engineering Overview (PACOM Theater) |
| | |
| • 0940-1000 | Break |
| | |
| • 1000-1130 | Command Sponsor Perspective |
| | |
| • 1130-1230 | Lunch |
| | |
| • 1230-1415 | Program Status |
| • 1415-1430 | Concluding Remarks |

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LTC Travis Bernritter

Transition Manager



ACTD 101 – How It Is Suppose to Work

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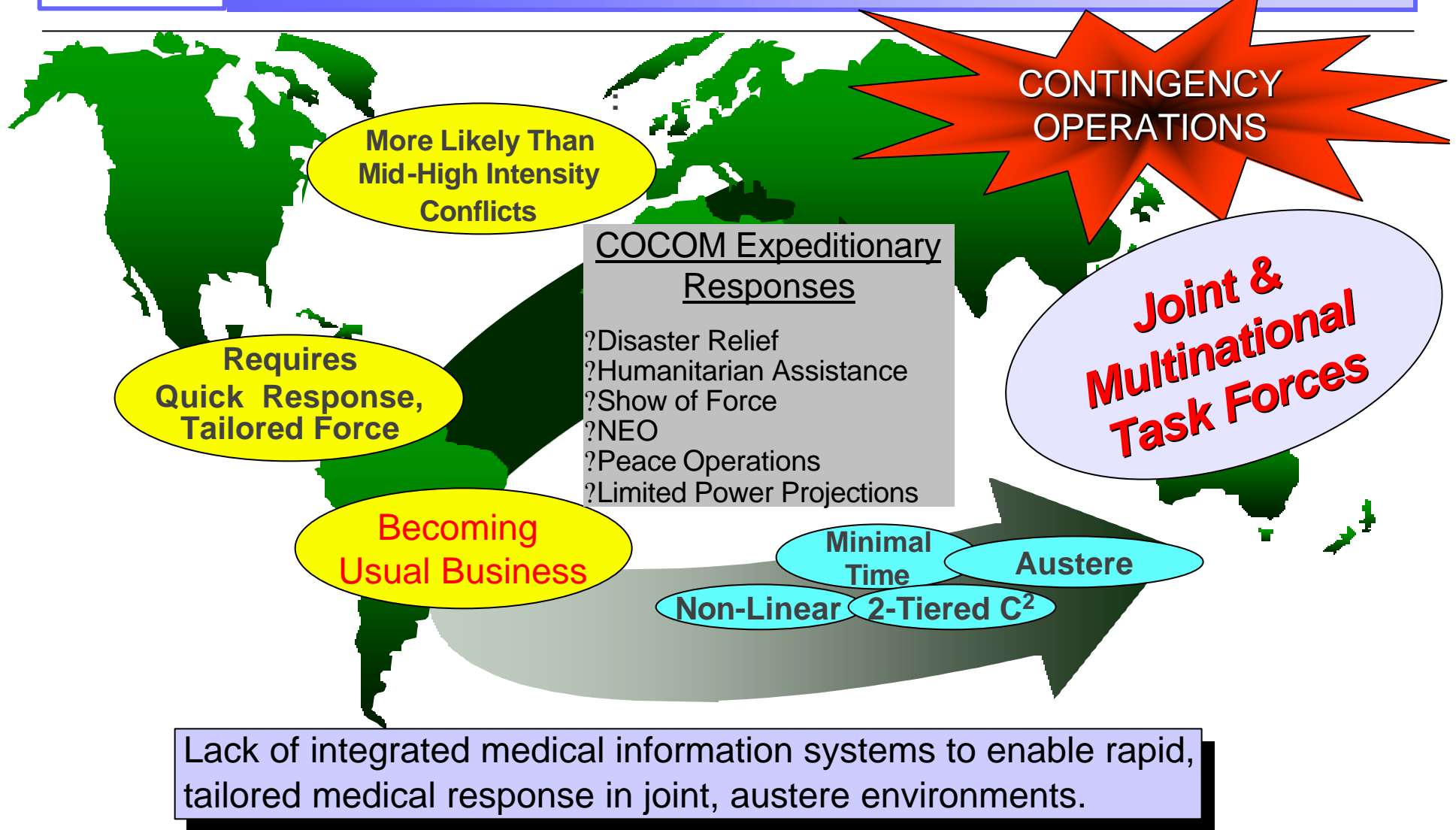
✍ Advanced Concept Technology Demonstrations (ACTDs)

- ✍ Exploit mature and maturing technologies to solve important military problems.
- ✍ At the conclusion of the ACTD operational demonstration, there are three potential outcomes.
 - ✍ The user sponsor may recommend acquisition of the technology and fielding of the residual capability that remains at the completion of the demonstration phase of the ACTD to provide an interim and limited operational capability.
 - ✍ If the capability or system does not demonstrate military utility, the project is terminated or returned to the technology base.
 - ✍ A third possibility is that the user's need is fully satisfied by fielding the residual capability that remains at the conclusion of the ACTD, and there is no need to acquire additional units.



Joint Operational Scenario A Common Theater Problem

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Operational Problems/Shortfalls

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- ✍ Limited Combatant Commander/Joint Task Force (JTF) surgeon medical situational awareness
- ✍ Limited medical Modeling and Simulation capability
- ✍ No Concept of Operations (CONOPS) or Tactics/Techniques/Procedures (TTPs) for the employment of telemedicine
- ✍ No interoperable joint medical communications
- ✍ No easily deployable medical Command and Control (C2) & clinical telemedicine suite



Mission and Operational Objectives

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Provide Combatant and JTF Commander the capability to defeat time, distance, and organizational obstacles to cost-effective Joint Health Support in austere and non-linear operational environments.

- ✍ Improve deployed medical support, reduce force attrition and improve visibility during patient movement
- ✍ Provide a common operational view of the medical battle space to improve command and control for the Combatant and JTF Surgeons and deployed medical units.
- ✍ Create a trained, interoperable telemedicine organization to meet deployability, interoperability, and supportability requirements of JTF medical forces in austere and non-linear operations.
- ✍ Provide modeling and simulation technologies to enhance medical planning and mission rehearsal.

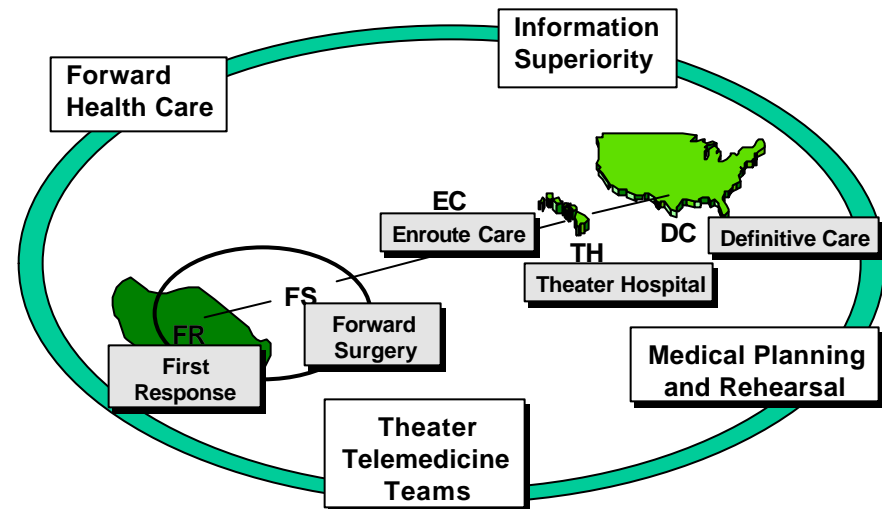


Operational Military Need

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A capability to defeat time, distance, and organizational obstacles to cost-effective Joint Health Support in austere and non-linear operational environments.

- ✍ Improved Force Health Protection
- ✍ Interoperable, trained support team
- ✍ Improved patient visibility
- ✍ Common medical situational awareness
- ✍ Force tailoring through mission planning & rehearsal



Theater-wide Joint Medical Information Superiority



JMO-T Management Documents

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- ✍ In 1997, Army asked to lead first medical ACTD
- ✍ Commander, USPACOM signed on as sponsor
- ✍ Implementation Directive:
 - ✍ Signed 1 February 1999
 - ✍ Represents JMO-T Mission Need Statement
- ✍ Emerged as Joint Medical Operations concept, enabled by information technologies
- ✍ Management Plan approved & signed 10 June 2001, updated 20 September 2002
- ✍ IMUA signed and approved 12 February 2002



Endorsers & Approvers

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Secretary of Defense

- ? Deputy Undersecretary for Advanced Systems & Concepts
- ? Assistant Secretary for Health Affairs
 - ? Health Operations Policy (HOP)
- ? Defense Research and Engineering
- ? Assistant Secretary for C³I

Joint Staff

- ? Force Structure, Resources, and Assessment (J8)
- ? Medical Readiness (J4)

Pacific Command

- ? Combatant Commander, USPACOM
- ? Command Surgeon
- ? Command Scientific Advisor
- ? Command J6

Department of the Army

- ? Training and Doctrine Command
 - Chief of Staff - Operations
- ? Surgeon General
 - Assistant Secretary for Acquisition, Logistics, & Technology

Department of the Navy

- ? Assistance Secretary for Research, Development, and Acquisition
- ? Chief, Naval Research
- ? HQ, US Marine Corps (Medical)
- ? Surgeon General

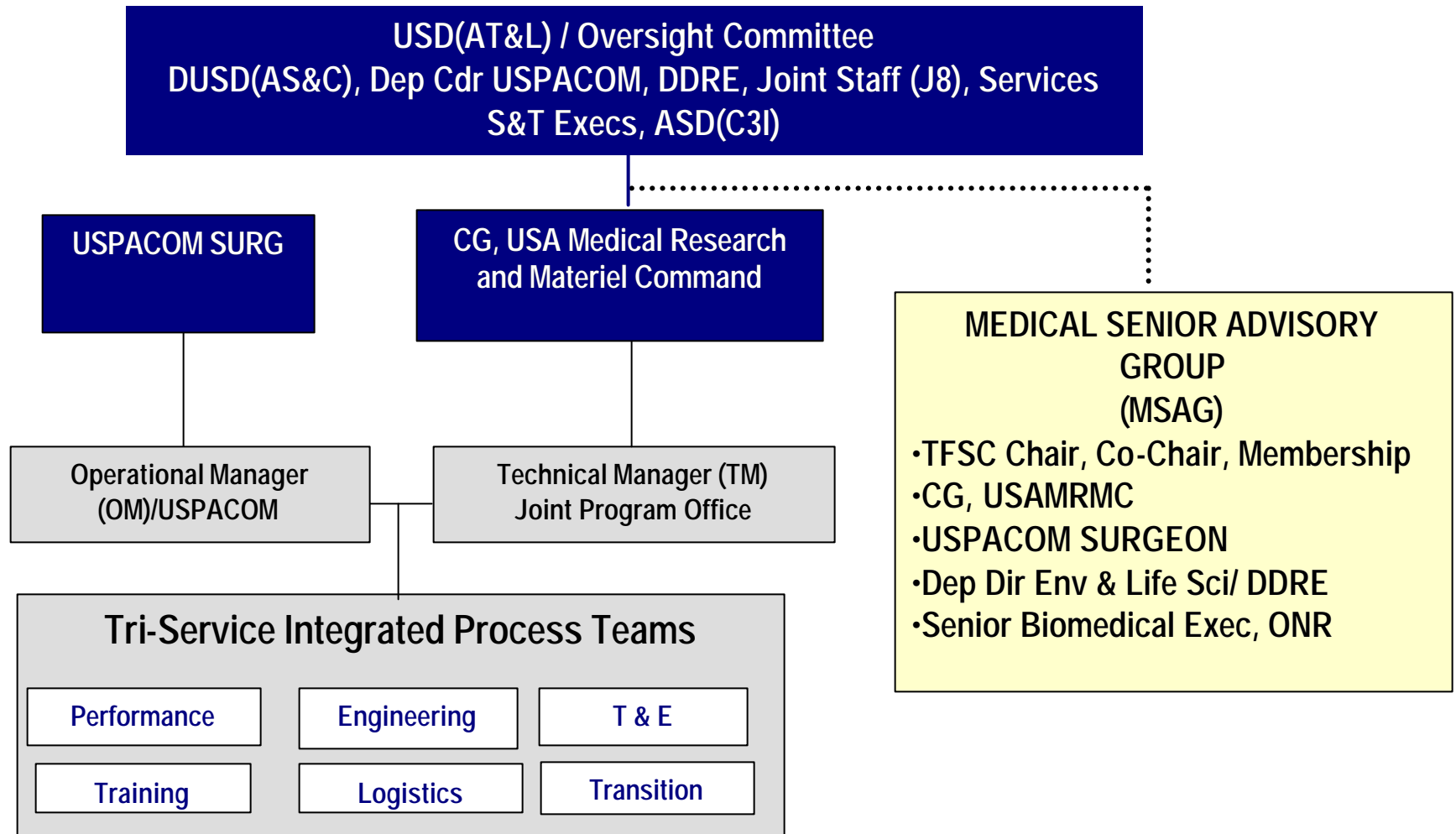
Department of the Air Force

- ? Assistance Secretary for Science, Technology, and Engineering
- ? Cdr, 311th Human Systems Wing
- ? Surgeon General



Management Structure

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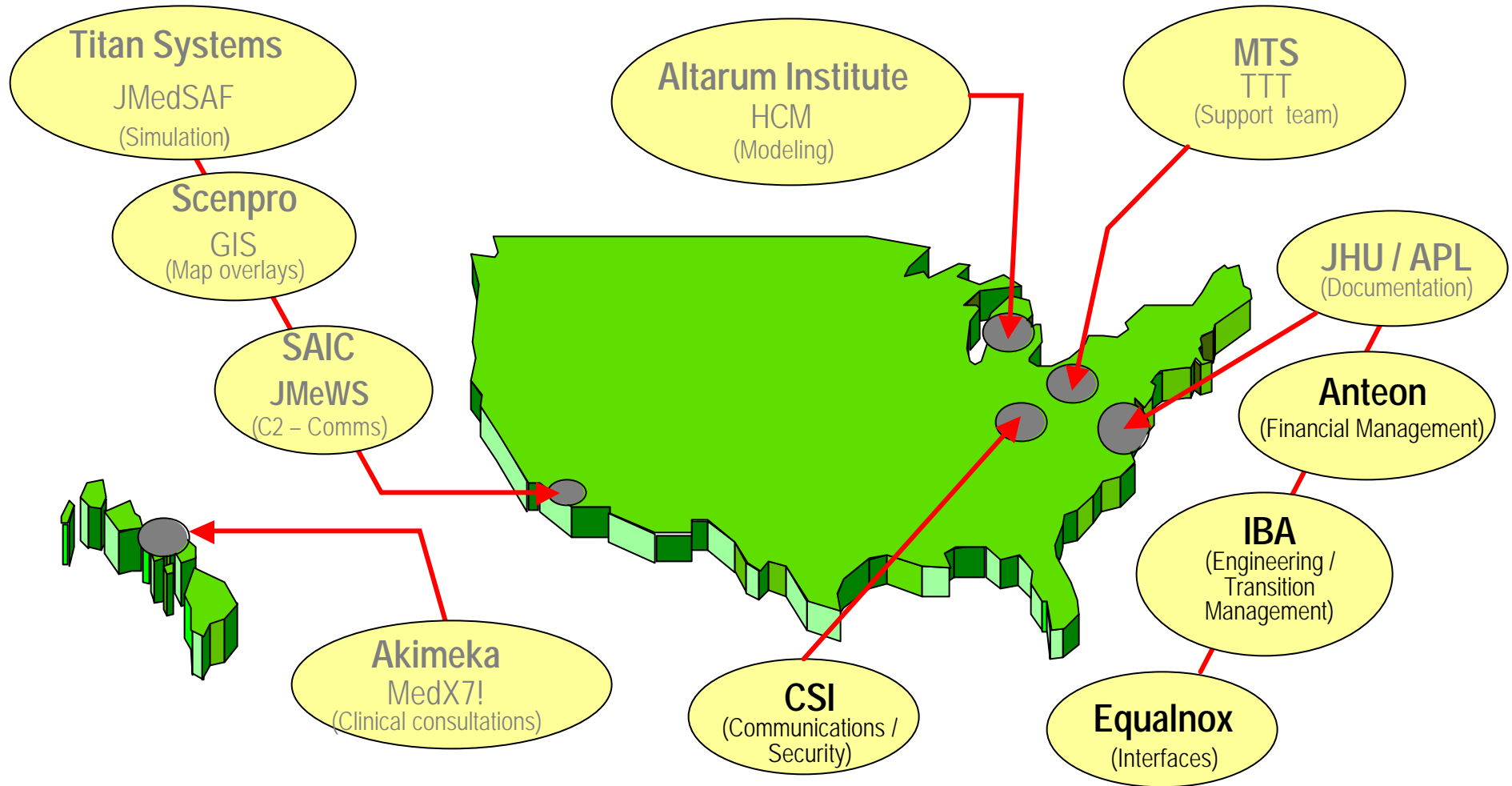




Commercial Partners

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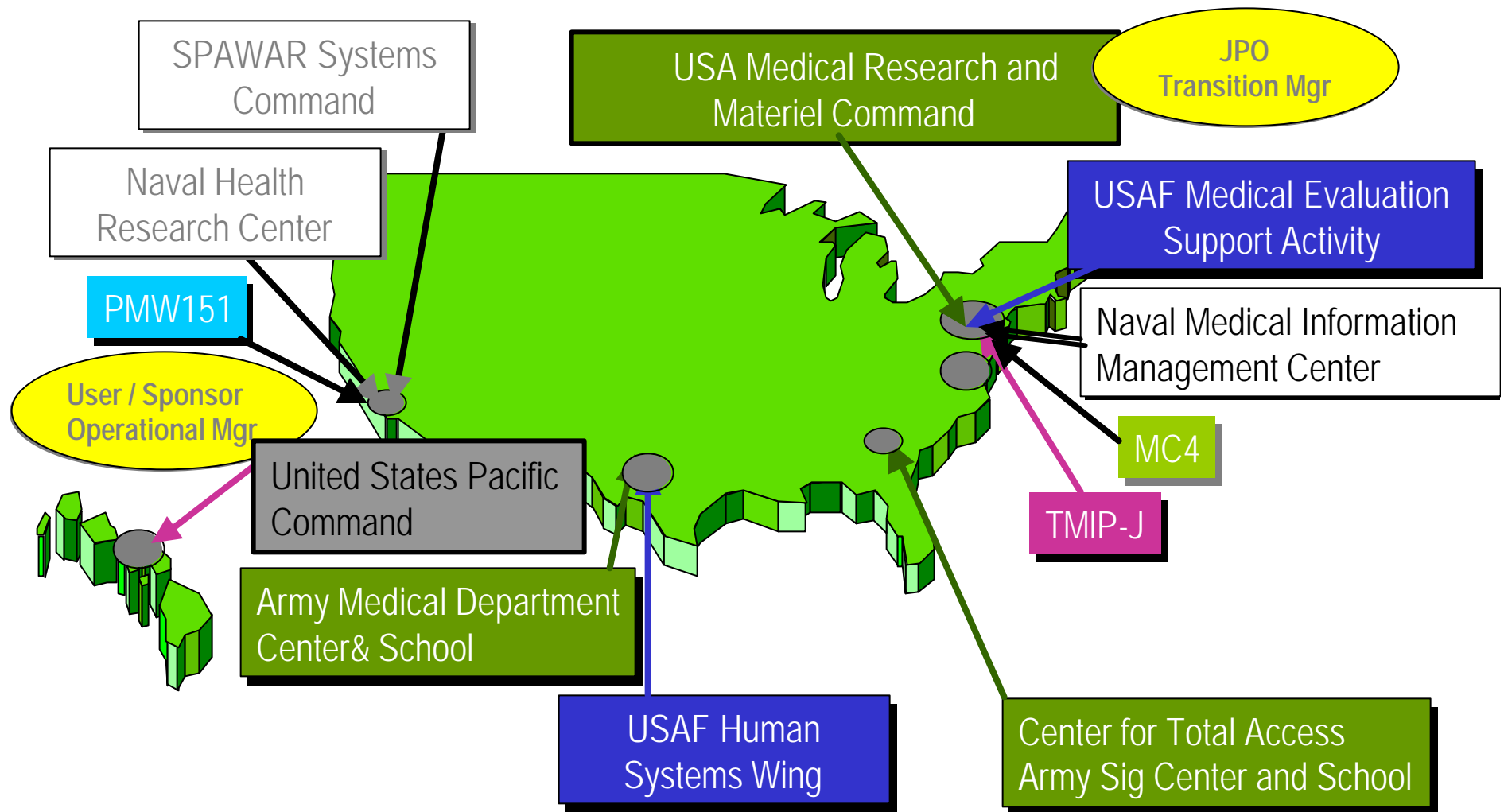




Government Partners

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Programmatic Objectives & Evaluation Criteria

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✍ Objectives

- ✍ Conduct meaningful demonstrations of the capability
- ✍ Fully integrate joint operations where possible
- ✍ Develop and test concepts of operations to optimize military effectiveness
- ✍ Prepare to transition the capability into acquisition without loss of momentum, if warranted
- ✍ Provide a residual operational capability as an interim solution prior to procurement

✍ Evaluation Criteria

- ✍ Response to user needs (address a critical military need)
- ✍ Maturity of technologies (place mature technology in the hands of the user on the battlefield today)
- ✍ Potential effectiveness (evaluate and refine operational requirements and develop a concept of operations in order to validate the military utility)



Past and Upcoming Activities

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Cobra Gold 00 (Thailand)	May 2000
Cobra Gold 01 (Thailand)	May 2001
Kernel Blitz- Experimental	Jun 2001
Modeling and Simulation Exercise	Jul 2001
Red Team Vulnerability Assessment	Sep 2001
Interim Theater Data Base Gap Analysis	Oct 2001
PACOM OM Demonstration	Nov 2001
Residual Fielding Agreement	Dec 2001
Interim Military Utility Assessments	Jan 2002
DoD (HA) Demonstration	Apr 2002
Cobra Gold 02 (Thailand)	May 2002
Seahawk 02	Jul 2002
Millennium Challenge 02	Aug 2002
PACFLT RIMPAC Demo	Sep 2002
Transition JMedSAF to JFCOM (J9)	Sep 2002
Final Military Utility Assessment/Final Report	Aug 2003



Capability Increases

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Capability	JMO-T System	Baseline	JMO-T Delta	End State
Force Health Protection	JMeWS, TCAS Integrated comms SW/HW & net controller	Runners	Interoperable networks HF/VHF/UHF/NIPRNET/SATCOM Net-centric availability at all echelons	Fully integrated automated system, available to personnel throughout the medical chain, to provide real time medical surveillance reporting and analysis; patient enrollment, accountability and in-transit visibility; reachback consultations w/wo photos and patient data; medical force command and control; medical battlespace awareness; and medical force planning and rehearsal supported by a fully trained and capable medical IM/comms team.
	Patient Movement and Visibility	Patient tags Patient data w/ patient	Automated patient movement requests Evacuation platform visibility	
	Clinical Reachback	High bandwidth/ overhead telemedicine systems or patient evacuations	Web-based, low bandwidth, free text w/wo photos and patient data for diagnostic/treatment assistance	
	Medical Data Surveillance System	Weekly Reports	Real time statistical analysis & trend projection	
Modeling/ Simulation	JMedSAF / HCM	Medical Analysis Tool	Medical force integrated w/ line E1 level modeling/rehearsal	
Medical Situational Awareness	Watchboard	Runners Weekly reports	Real time patient statistics Command status displays Automated Annex Q reporting	
Theater Telemedicine Team	TTT	Ad hoc external support	Fully trained, dedicated teams	

A lighter, more capable Force Health Protection package



Transition - Objectives

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✍ 1 a : passage from one state, stage, subject, or place to another : CHANGE b : a movement, development, or evolution from one form, stage, or style to another

Merriam-Webster Dictionary

✍ Key Objectives:

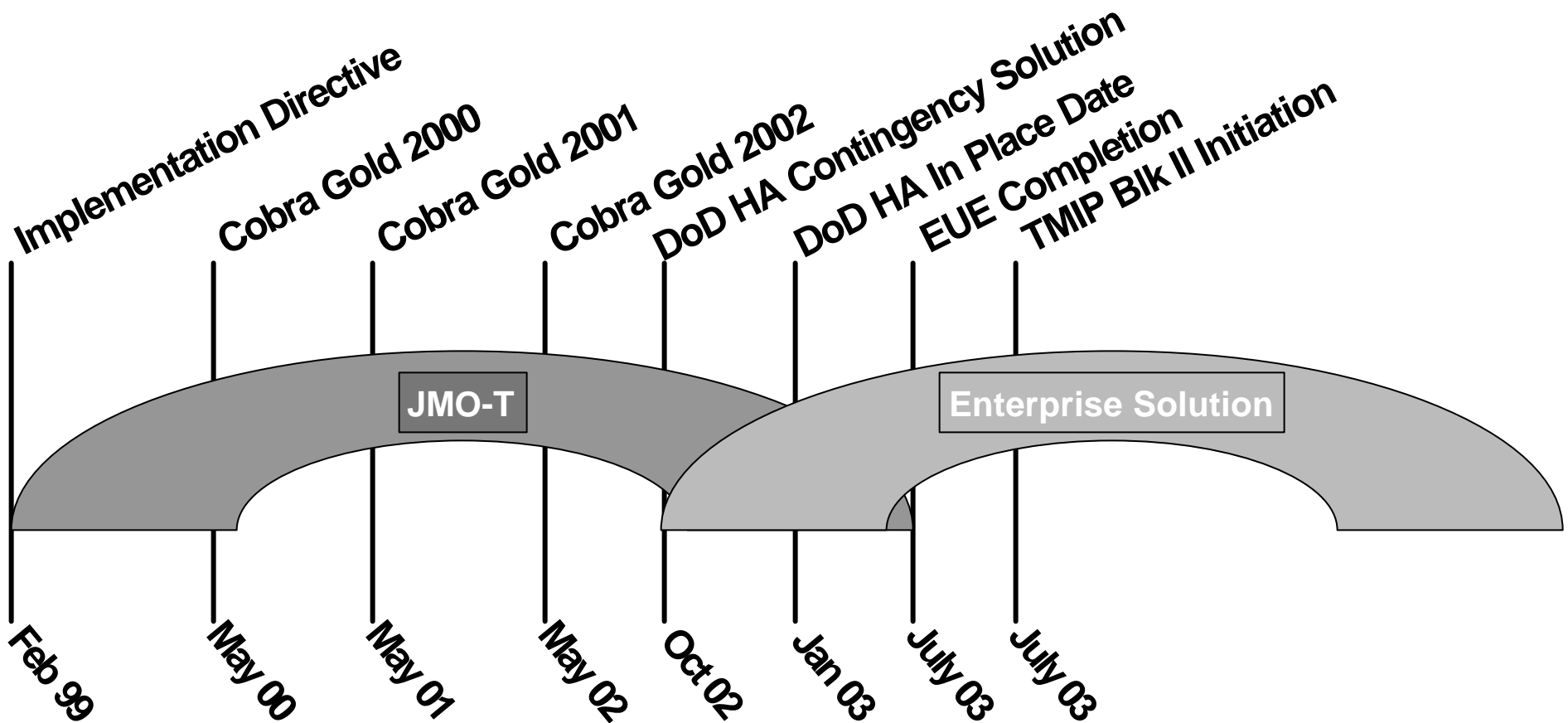
- ✍ Integrate previously tested JMO-T technologies with enterprise solutions and validate Joint Medical Operations Tactics, Techniques and Procedures.
- ✍ Transition selected concepts and technologies into residual fielding for an Extended User Evaluation (EUE) and service acquisition programs.
- ✍ Evaluate and engage targets of opportunity to demonstrate compatible technologies.
- ✍ Collect data for Final Military Utility Assessment (FMUA).
- ✍ Deliver FMUA to OSD and USPACOM.

INTENT – TAKE AN INVESTOR’S VIEW OF ACTD FUNDING



Transition Path

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Transition Initiatives – Support to Current Operations

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DoD HA – Theater Medical Information Program (TMIP)

-  Selected to provide a joint solution to medical data aggregation
-  Will provide a joint medical surveillance and C2 capability to the warfighter
-  Short turn around task to support DoD HA
-  Requires integration with service solutions
-  Potential inclusion to the Enterprise System – TMIP
-  Joint Staff visibility and interest
 -  JMO-T solution briefed to all Services, select Combatant Commands and DoD Health Affairs
 -  Joint funding for any new initiatives or future integration



Problem/Priorities – DoD HA

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Problem

-  What Automated Capabilities Will The Combatant Commanders Be Able To Use In The Next 0-6 Months To Support Force Health Protection Requirements?

Top Operational Priorities

-  Medical Command and Control
-  DNBI And Real Time Population Health In Theater
-  Reportable Medical Events
-  Casualty Reporting

Top IT Priorities

-  Automated collection/input of data
-  Data aggregated at specified levels
-  Analysis/Alert/Report ability at specified levels
-  Ability to warehouse data